

## Quick Start Guide

*This guide gets you started with a typical installation for InfoSphere Optim Query Capture and Replay.*

### Product overview

InfoSphere® Capture Replay is built on the IBM® InfoSphere Guardium® platform, and provides the ability to capture workloads, and to replay the captured workloads to analyze and compare the accuracy and execution time of the replayed SQL statements. The product includes two separate web interfaces. Use the InfoSphere Capture Replay web console to capture and replay workloads on DB2® for Linux, UNIX, and Windows databases. To capture and replay workloads on database combinations other than DB2-to-DB2, which is known as *heterogeneous capture and replay*, use the InfoSphere Guardium web console.

### 1 Step 1: Access the software and documentation



If you download InfoSphere Capture Replay from IBM Passport Advantage®, follow the instructions in the download document at: <http://www.ibm.com/support/docview.wss?uid=swg24034611>

This product offering includes:

- IBM InfoSphere Optim™ Query Capture and Replay Quick Start Guide and Installation Guide CD
- IBM InfoSphere Optim Query Capture and Replay 1.1 RedHat DVD
- IBM InfoSphere Optim Query Capture and Replay 1.1 Product Key CD
- IBM InfoSphere Optim Query Capture and Replay 1.1 S-TAP® Agents DVD
- IBM InfoSphere Guardium S-TAP Agents V9 DVD
- IBM InfoSphere Guardium V9 Base Product Image DVD
- IBM InfoSphere Guardium - Product Manuals V9.0 DVD
- IBM InfoSphere Guardium - VM Activation Kit V9.0 DVD

### 2 Step 2: Evaluate the hardware and system configuration

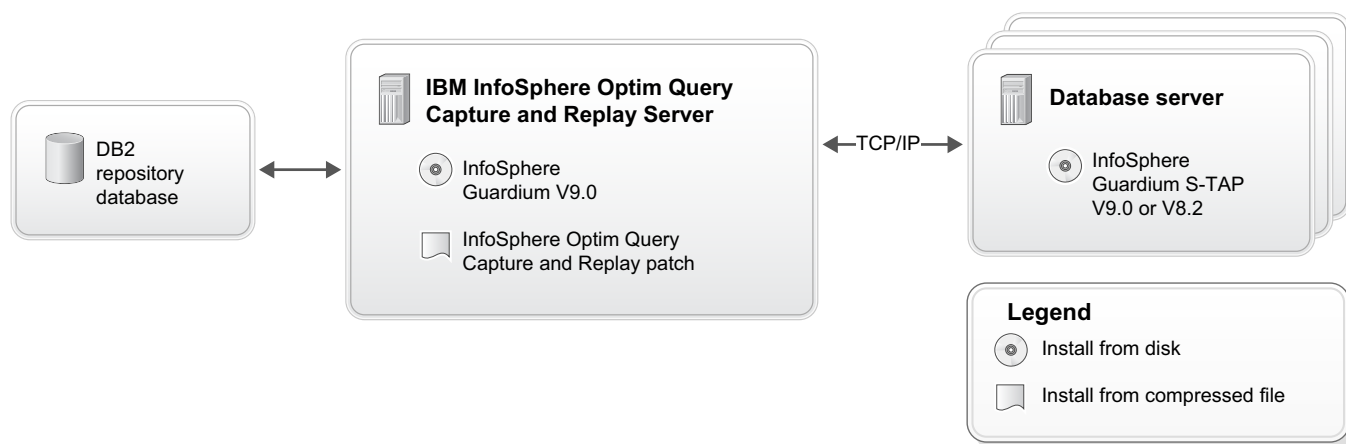


InfoSphere Capture Replay is an appliance solution that bundles an operating system and all necessary software. You can install the product on a physical appliance or on a VMware server such as VMware ESX. The installation program installs a Red Hat Linux Version 5.8, 32-bit, operating system on your server or virtual machine, and then installs the InfoSphere Guardium software. For detailed system requirements, see: <http://www.ibm.com/support/docview.wss?uid=swg27036587>

For information about how to set up a VMWare environment, see Appendix B: How to Create the Virtual Image in the InfoSphere Guardium information center at: <http://publib.boulder.ibm.com/infocenter/igsec/v1/index.jsp>.

### 3 Step 3: Review the installation architecture

The InfoSphere Capture Replay software package includes the software components and a software license. InfoSphere Capture Replay version 1.1.0.4 for Linux, UNIX, and Windows installed on InfoSphere Guardium version 9.0 supports both InfoSphere Guardium S-TAP version 8.2 and InfoSphere Guardium S-TAP version 9.0.



## 4 Step 4: Overview of an InfoSphere Capture Replay installation



These are the required steps for installing and configuring InfoSphere Capture Replay. Detailed instructions are in the *IBM InfoSphere Optim Query Capture and Replay Installation Guide* PDF that is available on the IBM InfoSphere Optim Query Capture and Replay Quick Start Guide and Installation Guide CD. The instructions are also available in the IBM InfoSphere Optim Query Capture and Replay information center at: <http://publib.boulder.ibm.com/infocenter/caprep/v1r1/index.jsp>.

High-level overview of the installation process:

1. **Tip:** To get an overview of the required input for each installation step, review and fill out the installation planners which are available in the installation guide PDF or from the information center.
2. **On the InfoSphere Capture Replay server:** Install and configure InfoSphere Guardium.
  - a. Install the InfoSphere Guardium appliance.

Install and configure the InfoSphere Guardium appliance for your environment and set passwords for the CLI, ADMIN, and ACCESS MANAGER users. You install the appliance from the system command line, and you configure the installation from the InfoSphere Guardium Command Line Interface (CLI). A typical installation, including system reboots, takes a minimum of 45 minutes.
  - b. Install the license key.

The InfoSphere Capture Replay license enables the capture and replay feature on the InfoSphere Guardium appliance. You can use the command line to install the license, or use the InfoSphere Guardium web console at [https://guardium\\_hostname\\_or\\_ip:8443](https://guardium_hostname_or_ip:8443).
  - c. Use the InfoSphere Guardium CLI to install InfoSphere Capture Replay version 1.1.0.4 patch.

InfoSphere Capture Replay is installed as a patch on the InfoSphere Guardium appliance, and provides the web console user interface for DB2-to-DB2 capture and replay.
  - d. Use the InfoSphere Guardium web console to install the required capture and replay policies.

A policy is a filter that defines the information that is included in the workloads that you capture. Depending on the type of workload capture and replay that you plan to do, install one of the following policies:

    - Capture and Replay - DB2-to-DB2
    - Capture and Replay - Heterogeneous
3. **On each database server:** Install InfoSphere Guardium S-TAP on each database server that you will use for capturing or replaying workloads.

InfoSphere Guardium S-TAP is a lightweight software component that runs on the database server and is used by the InfoSphere Guardium appliance to collect local and network traffic to that database. A root account is required to install on Linux and UNIX systems, and an administrator account to install on Windows. To complete the InfoSphere Guardium S-TAP installation, the database server must reboot.
4. **On the InfoSphere Capture Replay server:** Complete the product configuration.
  - a. **Optional: DB2-to-DB2:** Configure InfoSphere Capture Replay for web console authentication.

To secure the InfoSphere Capture Replay web console and to use it with multiple users, you must configure it for web console authentication by adding a repository database. Then, configure authentication for the users and groups of that database.
  - b. **Heterogeneous:** Use the InfoSphere Guardium web console to add the role of user to the admin user ID.

Before you can use the InfoSphere Guardium web console for heterogeneous capture and replay, you must add the role of user to the admin user ID.
  - c. Use the InfoSphere Guardium web console to add an inspection engine for each database instance that you will use for capturing or replaying workloads.

Inspection engines make the SQL traffic that is captured by InfoSphere Guardium S-TAP available for the capture and replay tool.
  - d. **DB2-to-DB2:** Use the InfoSphere Capture Replay web console to add database connections.

To capture and replay workloads you must first add database connections to the DB2 databases that you configured for capture and replay.
  - e. **DB2-to-DB2:** Use the InfoSphere Capture Replay web console Manage Privileges page to grant capture and replay privileges to your database users.

To capture workloads, replay workloads, generate reports, and perform other actions, the capture and replay database user IDs must have the correct privileges on the databases.

## 5 Step 5: Capture, replay, and create a report for a workload



You can now use the product web consoles to capture workloads from one database, replay them on other databases, and compare workloads.


**Tip:** Before you start capturing a workload, clone the capture database on the database server that hosts your replay database. You can use a tool such as FlashCopy®, or backup, restore, and roll forward to a point in time. Cloning the database ensures that the replayed workload more closely simulates the captured workload.

### *DB2-to-DB2 capture and replay*

1. Open the InfoSphere Capture Replay web console at:  
`https://guardium_hostname_or_ip:8443/dsweb/console/ocr/index.jsp`
2. From the task launcher, configure the database connections and privileges for the databases from which to capture the target workload, and on which you plan to replay the workload.
  - a. Click **Add database connections** and add database connections for the databases.
  - b. Click **Manage capture and replay database privileges** and grant capture and replay privileges to the users of the databases.
3. Capture a workload. From the Task Launcher, click **Capture a DB2 workload**.
4. Transform the workload.
  - a. When the workload is captured, from the Capture and Replay page, select the SQL Workloads tab.
  - b. Select the captured workload and click **2. Transform**.
5. Select the new replay-ready workload and click **3. Replay**.
6. After the workload replays, select the new replayed workload and click **4. Report** to create a report that lets you compare the execution of the two workloads.

### *Heterogeneous capture and replay*

1. Log on to the InfoSphere Guardium web console as the ADMIN user at:  
`https://guardium_hostname_or_ip:8443`
2. Verify that you have installed the required capture and replay policy.
3. Select the **Tools** tab, then select Replay Builder from the Config & Control pane.

**Tip:** Click  to open the embedded help for Capture Replay, which provides detailed instructions for the following steps.
4. Add a replay configuration to identify the SQL stream that you want to capture.
5. Stage the replay configuration that you created to filter the captured data and to associate it with the replay configuration.
6. Specify the replay database on which you want to replay the captured workload, set other parameters for the replay, and then replay the workload.
7. After the workload replays, use the capture-replay list to compare the executions of the captured workload with the replayed workload.

## More information



For more information, see the following resources:

- Information roadmap at: [http://www.ibm.com/developerworks/data/roadmaps/roadmap\\_caprep.html](http://www.ibm.com/developerworks/data/roadmaps/roadmap_caprep.html)
- Product support at: [http://www.ibm.com/support/entry/portal/Overview/Software/Information\\_Management/InfoSphere\\_Optim\\_Query\\_Capture\\_and\\_Replay](http://www.ibm.com/support/entry/portal/Overview/Software/Information_Management/InfoSphere_Optim_Query_Capture_and_Replay)
- If you are re-installing version 1.1 of the InfoSphere Capture Replay server software for InfoSphere Guardium version 8.2, see the installation guide that shipped with your software, or download publication number GC19-3755-00 from the IBM Publications Center at: <http://www.ibm.com/e-business/linkweb/publications/servlet/pbi.wss>.

